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Washington, DC 20005

July 7, 2016

Ex Parte

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Use of Spectrum Bands Above 24 GHz for Mobile Radio Services, GN Docket No. 14-177, IB Docket Nos. 15-256 & 97-95, RM-11664 & WT Docket No. 10-112

Dear Ms. Dortch,

AT&T had it right earlier in this docket when it explained that spectrum aggregation limits or caps on millimeter wave (“mmW”) bands would undermine potential innovation in the delivery of ultra-high data rates and low latencies through 5G.¹ That is particularly so at this critical stage of 5G development. AT&T has more recently argued for a high-band spectrum screen, even proposing to single out 28 GHz spectrum for a band-specific limit.² The Commission should reject this suggestion, which will undermine Chairman Wheeler’s goal of “[o]pening up spectrum and offering flexibility to operators and innovators ... to enable the 5G revolution.”³

The Commission should decline to adopt mmW spectrum aggregation policies.

While the mmW bands hold much promise for 5G, many of the potential use cases are not clearly defined. So it is not surprising that the record contains no evidence from AT&T or anyone else of actual or tangible harm that would warrant a mmW spectrum screen or other aggregation limit.⁴ AT&T agreed earlier in the docket, noting that “[i]mposing spectrum aggregation caps while the mmW frequencies are still being studied would be premature and arbitrary.”⁵ But now AT&T supports the proposed overall aggregation threshold of 1250 MHz for licensed UMFU spectrum.

¹ AT&T Reply Comments at 12.

² See Letter from Joan Marsh, AT&T, to Marlene H. Dortch, FCC, GN Docket No. 14-177 (July 5, 2016), at 1-3 (“AT&T Letter”).

³ Prepared Remarks of FCC Chairman Tom Wheeler, *The Future of Wireless: A Vision for U.S. Leadership in a 5G World*, National Press Club, Washington, D.C., at 3, 5 (June 20, 2016) (“Wheeler Remarks”), http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0620/DOC-339920A1.pdf.

⁴ See Letter from Gregory M. Romano, Verizon, to Marlene H. Dortch, FCC (June 24, 2016) (“Verizon Letter”).

⁵ AT&T Reply Comments at 12.

This ignores the large amounts of mmW spectrum that will be available as 5G technologies and services develop. In addition to the 10.85 GHz of spectrum that the Commission proposes to make available in the 28 GHz, 37 GHz, 39 GHz, and 64-71 GHz bands, the *Further Notice* will propose making an additional 17.7 GHz of mmW spectrum available in the 24-25 GHz, 32 GHz, 42 GHz, 48 GHz, 51 GHz, 70 GHz, and 80 GHz bands.⁶ This will amount to more than 25 GHz more spectrum than is available today.

Nor is there any basis to adopt a 28 GHz band-specific aggregation limit.⁷ The Commission has rejected prior calls to impose a spectrum aggregation scheme that weighs one band as more valuable than another because of the difficulty in accurately assessing a band's significance.⁸ Indeed, AT&T's uncited claim about the purported unique nature of 28 GHz spectrum at this late stage of the rulemaking docket amounts to mere speculation in an area that is just starting to be explored. And much of the equipment and other development occurring in the 28 GHz band will be transferable to the 37-39 GHz band as resources are focused there as well. But as AT&T itself has previously explained, the acquisition cost of the spectrum (whether at auction or in the secondary market) will reflect any arguable differences between bands in any event.⁹

And with the Commission proposing to make so much spectrum available in multiple alternative mmW bands to enable 5G, limiting the ability of an operator to access large swaths of contiguous spectrum in a single band is not only inefficient, it would likely delay 5G investment and deployment and potentially undermine 5G performance without solving any problem. Curiously, AT&T recommends against a similar constraint for the 37-39 GHz band.¹⁰ In that sense, a limit on the 28 GHz band does "not seek to solve any actual problem, but [is] merely [an] attempt ... to hobble particular competitors in the marketplace for the benefit of others."¹¹

The Commission should facilitate the flexible use of spectrum, not delay 5G by engaging in a protracted battle to retake spectrum from incumbent licensees.

The Commission should also reject AT&T's earlier, unworkable proposal to allow 28 GHz incumbent licensees to keep only spectrum currently in "commercial use," while taking back any remainder and putting it up for re-auction. That proposal would promote only litigation, not the introduction of 5G in the United States. Incumbent providers understandably would fight any such plan, leading to a lengthy dispute that will slow momentum towards

⁶ See FCC, Fact Sheet: Spectrum Frontiers Proposal to Identify, Open Up Vast Amounts of New High-Band Spectrum for Next Generation (5G) Wireless Broadband, at 2 (June 23, 2016), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0623/DOC-339990A1.pdf.

⁷ AT&T Letter at 3.

⁸ See Verizon Letter at 3-4.

⁹ Comments of AT&T, WT Docket No. 12-269, at 9 (Nov. 28, 2012); see also *id.* at 66 (noting that imposing limits on types of bands would "reward carriers that sat out ... secondary market opportunities ... by limiting the market (and hence lowering the price) for that spectrum going forward").

¹⁰ AT&T Letter at 3.

¹¹ *Id.* at 7.

investment and innovation across licensed spectrum and put a cloud over the available mmW bands. Tellingly, AT&T did not weigh in against flexible use rights for incumbents in initial comments in this proceeding but did so on reply, just days after Verizon announced its intent to lease spectrum from an incumbent 28 GHz licensee. The Commission should not let parochial claims by competitors distract from its overarching goal: to make spectrum available for 5G as quickly as possible to allow the U.S. to maintain its global mobile leadership.¹²

As a matter of policy, the Commission has recognized that granting incumbents flexible use rights – not splitting terrestrial usage rights – is the prudent course of action for rapidly repurposing auctioned spectrum. For example, the Commission changed the technical rules applicable to the WCS band to grant incumbent licensees – led by AT&T – the flexibility to provide mobile broadband.¹³ Likewise, the Commission changed its BRS/EBS rules to allow existing licensees to provide two-way services, including mobile broadband,¹⁴ and in the AWS-4 proceeding, it removed barriers to mobile broadband use and issued new wireless radio licenses to the satellite incumbents.¹⁵ The Commission has correctly proposed to do the same thing here,¹⁶ and AT&T offers no basis to depart from this precedent.

* * *

Verizon supports the Commission's efforts to adopt a flexible framework for mmW spectrum that will allow the wireless industry to rapidly deploy innovative 5G technologies. This spectrum holds great potential, and the Commission should not jeopardize those opportunities by imposing unwarranted spectrum aggregation policies.

¹² It is also virtually impossible to define what spectrum is “unused,” as AT&T itself has explained in this proceeding when opposing “use it-or-share it” build-out policies. *See* AT&T Comments at 21 (“Indeed, even defining ‘unused spectrum’ would be challenging. In some instances, managing a high quality of service requirement may cause spectrum ‘use’ to appear very low in certain intervals when capacity is actually being held in reserve for peak demand periods. Crafting a definition of ‘unused’ that accounts for all of these nuanced scenarios will be difficult, if not impossible.”).

¹³ *Operation of Wireless Communications Services in the 2.3 GHz Band*, Report and Order and Second Report and Order, 25 FCC Rcd 11710 (2010); Order on Reconsideration, 27 FCC Rcd 13651 (2012).

¹⁴ *Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, Report and Order and Further Notice of Proposed Rulemaking, 19 FCC Rcd 14165 (2004); Fifth Report and Order, 29 FCC Rcd 6331 (2014).

¹⁵ *Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands*, Report and Order and Order of Proposed Modification, 27 FCC Rcd 16102 (2012).

¹⁶ *Spectrum Bands Above 24 GHz for Mobile Radio Services*, Notice of Proposed Rulemaking, 30 FCC Rcd 11878, 11908-09 ¶¶ 95-96 (2015) (“Notice”).

Marlene H. Dortch

July 7, 2016

Page 4

This letter is being filed electronically pursuant to Section 1.1206 of the Commission's rules. Please contact me if you have any questions.

Sincerely,

/s/ Gregory M. Romano

Gregory M. Romano

Vice President & Associate General Counsel